VISIT…

TRADE MARK

Thompson

REG. U.S. PAT. OFF.

HANDBOOK

of the

THOMPSON SUBMACHINE GUN

MODEL OF 1928
MODEL OF 1921

Thompson Semi-Automatic Carbine

MODEL OF 1927

AUTO-ORDNANCE CORPORATION

302 BROADWAY
NEW YORK, N. Y., U. S. A.

CABLE ADDRESS: "AUTORDCO—NEW YORK"

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NOTE

The directions and *precautions* contained herein should be carefully noted before operating the gun.

Thompson Submachine Guns are made in Model 1921 and Model 1928. (For convenience, these are sometimes designated Model No. 21A and Model No. 28A.) Models 21AC and 28AC are equipped with Cutts Compensators.

The Model 1921, when fired full-automatic, fires at the cyclic rate of about 800 shots per minute.

The Model 1928 fires at a cyclic rate of about 600 shots per minute.

The general instructions contained herein are the same for Model 1928 as for Model 1921.

While the principles of design are identical in both models, the following parts of Model 1928 are different in construction from the corresponding parts of the 1921 Model, viz.: Actuator, Recoil Spring, Buffer, Firing Pin Spring.

On some 1928 models, the foregrip is horizontal instead of vertical. See page 51.

Type XX (20-cartridge) box magazines are not identical for Model 1921 and Model 1928. When ordering, be sure and specify for which model wanted.

All type L (50-cartridge) drum magazines can be used with Model 1921 guns, but *only those type L magazines which are marked "Wind to 9 Clicks" should be used with the Model 1928 guns.* Type "C" (100-cartridge) drum magazines are for Model 1921 Submachine guns only, and cannot be used with Model 1928 guns.

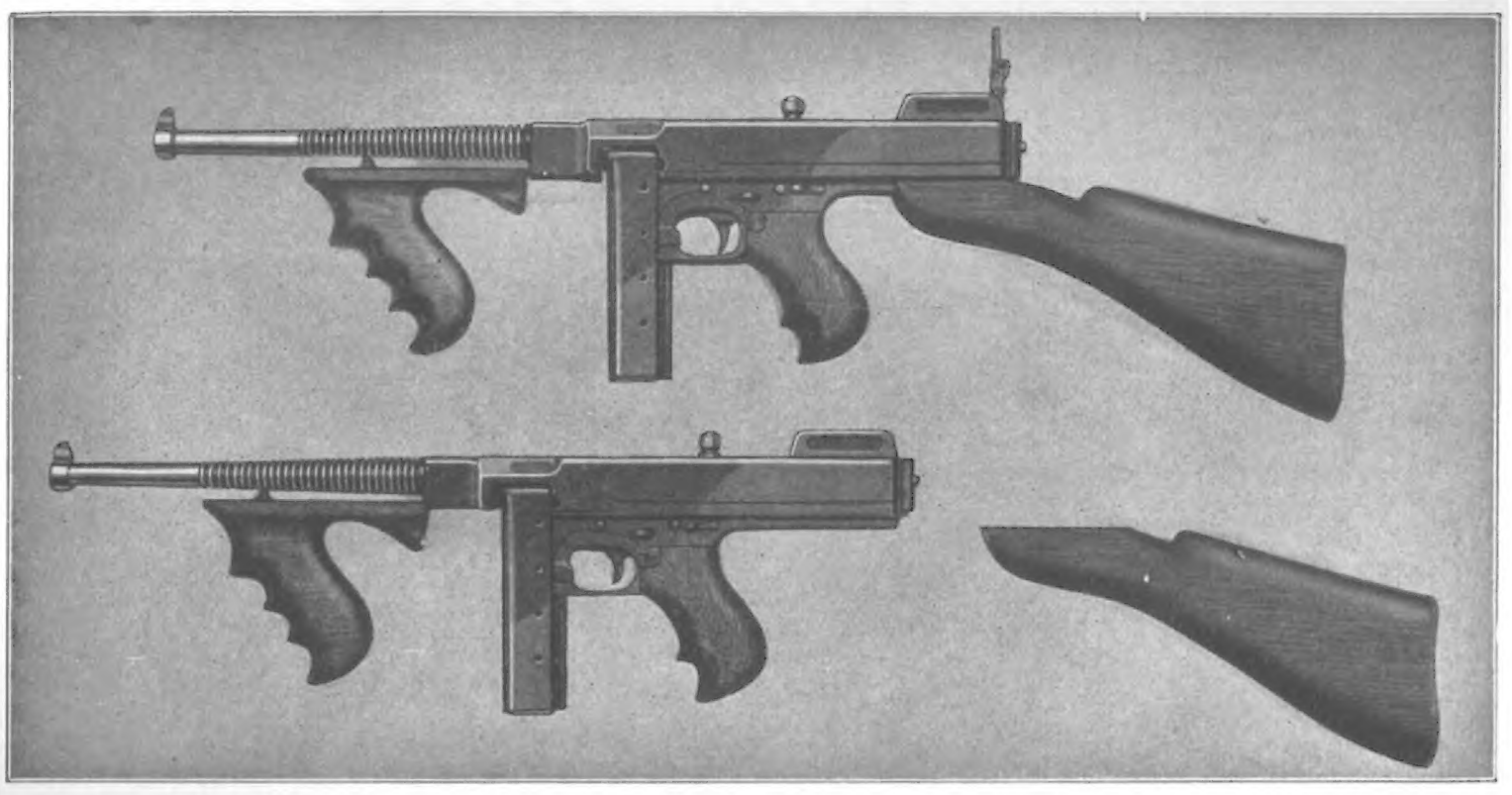


PLATE I

Thompson **Gun calibre .45 with butt stock attached and sight leaf up; and gun with leaf down and butt stock removed.**

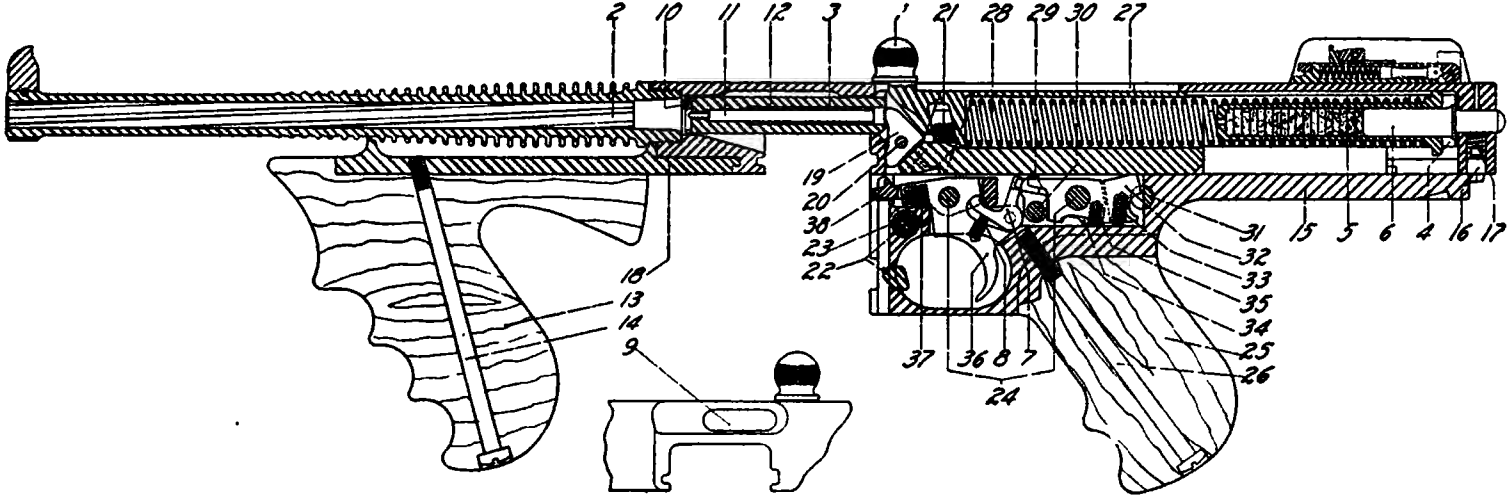


PLATE II

Sectional view of gun with bolt in closed position and locked, numbered to correspond with the numbers in the list of components. See page six and following text.

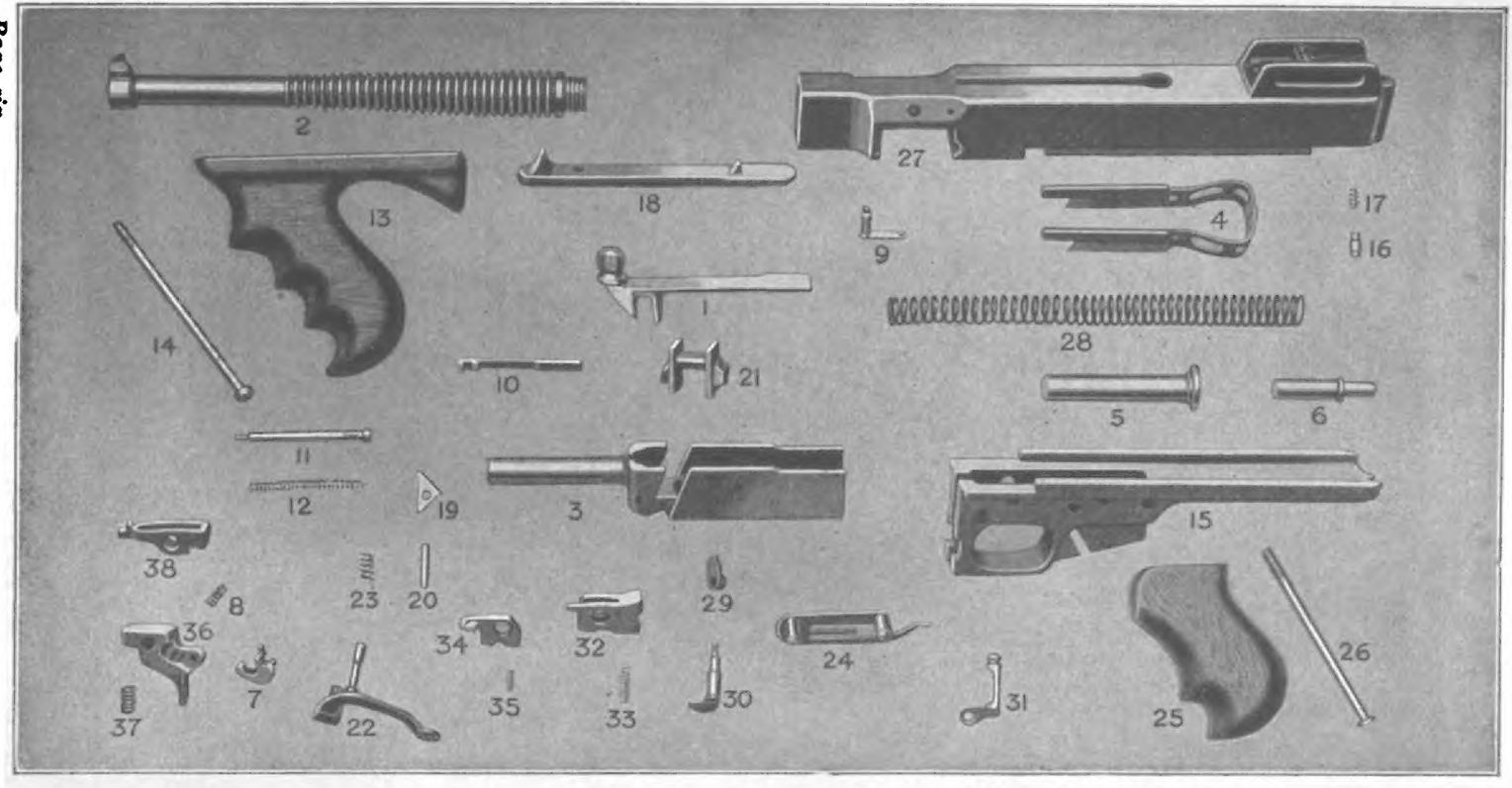


PLATE III

Components of Gun, numbered to correspond with numbers in the list of components. See following text.

Part I

LIST OF COMPONENTS OF THOMPSON SUBMACHINE GUN CALIBRE .45

1. Actuator.*
2. Barrel.
3. Bolt.
4. Breech Oiler (including Felt Pads).
5. Buffer (including Fiber Discs).*
6. Buffer Pilot.
7. Disconnector.
8. Disconnector Spring.
9. Ejector.
10. Extractor.
11. Firing Pin.
12. Firing Pin Spring.*
13. Fore Grip.
14. Fore Grip Screw.
15. Frame.
16. Frame Latch.
17. Frame Latch Spring.
18. Grip Mount.
19. Hammer.
20. Hammer Pin.
21. Lock.
22. Magazine Catch.
23. Magazine Catch Spring.
24. Pivot Plate.
25. Rear Grip.
26. Rear Grip Screw.
27. Receiver.
28. Recoil Spring.*
29. Rocker.
30. Rocker Pivot or Fire Control Lever.
31. Safety.
32. Sear.
33. Sear Spring.
34. Sear Lever.
35. Sear Lever Spring.
36. Trigger.
37. Trigger Spring.
38. Trip.*

* These parts of model 1921 do not interchange with corresponding parts of model 1928.

Note—These numbers correspond to numbered parts shown on plates II and III and following text.

MAGAZINES

Type XX Box Magazine (20-cartridge).
- Body.
- Follower.
- Spring.
- Floor Plate.

Type L Magazine (50-cartridge drum).
- Body, assembled.
- Cover, assembled.
- Rotor, assembled.
- Winding Key, assembled.*
- Body Clip.*

Type C Magazine (100-cartridge drum).
- Body, assembled.
- Cover, assembled.
- Rotor, assembled.
- Winding Key, assembled.*
- Body Clip.*

SIGHTS

Front Sight (assembled to barrel).

Rear Sight.
- Eye Piece.
- Rear Sight Base (assembled to receiver).
- Sight Base Pin.
- Sight Plunger.
- Sight Plunger Spring.
- Sight Leaf (with slide retaining pin).
- Sight Slide.
- Sight Slide Catch.
- Sight Slide Catch Screw.
- Windage Screw, assembled.

  Consisting of: Windage Screw.
  Windage Screw Collar.
  Windage Screw Collar Pin.

*These parts are identical for both Type L and Type C Magazines.

PLATE IV

Gun shown with three types of magazines—butt stock detached.
Type C 100 cartridge capacity. Type L 50 cartridge capacity. Type XX 20 cartridge capacity.

APPENDAGES AND ACCESSORIES

Butt Stock complete, consisting of:

- Butt Stock (stripped).
- Butt Stock Slide Group.
  - Butt Stock Slide.
  - Butt Stock Catch.
  - Butt Stock Catch Pin.
  - Butt Stock Catch Spring.
  - Butt Stock Screw, large.
  - Butt Stock Screw, small.
- Butt Plate Group:
  - Butt Plate (stripped).
  - Butt Plate Cap.
  - Butt Plate Pin.
  - Butt Plate Spring.
  - Butt Plate Spring Screw.
  - Butt Plate Screw, large.
  - Butt Plate Screw, small.

Cleaning Rod.
Brass Wire Brush.
Oil Can.

Part II

DIRECTIONS FOR OPERATING GUN

The gun may be set for either full-automatic or single shot fire. It is provided with sights and a detachable butt stock. Three types of magazines having capacities of 20, 50 and 100 cartridges, respectively, may be used.

It is possible to fire the Submachine Gun from the hip either full-automatic or single shot, with any of the magazines, with or without the butt stock attached. Even though the rocker pivot is set for full-automatic fire, single shots may be obtained by a quick release of the trigger for each shot.

It is also possible to use the gun for aimed fire from the shoulder, either full-automatic or single shots, with any of the magazines.

Sight

The sight is graduated up to 600 yards for the 230-grain bullet cartridge. The effective range of the weapon with this standard ammunition is about 350 yards. With tracer ammunition very good results can be secured up to the 600 yards range. The eyepiece is laterally adjustable to correct for windage and drift. For rapid firing with the sight leaf down a 50-yard open sight is provided (Point Blank).

The index line on the eyepiece to "zero" for lateral adjustment is omitted in manufacture to allow for individual determination of this point. After this point has been satisfactorily determined it is suggested that a line

be placed on the eye-piece index finger with a sharp knife or other sharp instrument.

The personal element of holding the gun greatly affects the accuracy of fire, and consequently there may be a considerable variation in hits when the same sight setting is used by different persons. Holding the gun loosely tends toward shooting high. On page 50 the sight correction for one foot at the various ranges is tabulated. It will aid in judging these small measurements to bear in mind that the thickness of the projection on the sight slide containing the battle sight notch is .05-inch, and that the thickness of the eye piece is also .05-inch.

The natural tendency of all automatic rifles, especially in bursts of fire, is to raise the muzzle; that of the average marksman is to shoot high; consequently the submachine gun should be sighted slightly low, with a fine sight (the top of the front sight just appearing in the bottom of the peep or open sight), in order to obtain maximum accurate results. The slightly upward and to the right tendency of this gun, especially in bursts of fire, can be corrected by a small amount of practice on the part of the gunner, in holding steady.

The Thompson Gun should be used principally semi-automatic, i. e., a single shot for each pull of the trigger. A rate of fire of 100 aimed shots can be easily obtained in one minute in this manner. For full-automatic purposes, or like a machine gun, the gun should be fired in succession of bursts of three to six shots at a time for most accurate results.

TO FIRE

First be sure gun is well cleaned and oiled with sufficient oil on the oil pads of the breech oiler (4).

Then SET SIGHT. The sight is set by raising the leaf and sliding the slide to the range desired. Lateral correction (right or left) is obtained by turning the small thumb screw.

To Fire — Semi-Automatically (A Single Shot for Each Pull of the Trigger).

The normal method of firing the Thompson Submachine Gun is semi-automatically, i. e., a single shot for each separate pull of the trigger. To accomplish this first cock the bolt (3) by grasping the actuator (1) with the left hand and pull it rearward as far as possible, i. e., until it clicks twice. Note: IT IS NECESSARY TO HAVE THE BOLT COCKED BEFORE EITHER THE SAFETY LEVER (31) OR THE FIRE CONTROL LEVER (30) CAN BE TURNED TO THE POSITION DESIRED. It is advisable to turn the safety lever (31) to the safe position, that is, so that it points rearward. Then turn the fire control lever (30) so that it also points rearward. The rear end of the gun is towards the butt. The piece is now in its cocked position for semi-automatic fire but locked with the safety lever (31) on.

Face the target pointing the barrel in general direction of range and insert loaded magazine of the type desired. When in the proper position the magazine will click in place. In the case of the box type magazine (see Plate

IV—Page 9) it is pushed upward into the groove at the end of the trigger guard until it clicks into place. The 50-capacity, Type L, and the 100-capacity, Type C Drum Magazines (see Plate IV—Page 9) are inserted from left to right into the horizontal grooves of the piece as shown on Plate IV, Page 9, the distinction being that the 20-capacity magazine is inserted upward or vertically whilst the drum magazines are inserted sidewise or horizontally. In all cases be sure and push magazines well up or in so that the magazine catch can snap into position and hold the magazine securely. Then set the safety (31) to "Fire" by turning the safety lever (31) so that it points forward towards the muzzle at the position marked "Fire." Pull the trigger and *release it quickly* for each shot desired.

To Fire—Full-Automatically.

At the shorter ranges the Thompson Gun can be fired very effectively full-automatically, i. e., (like a machine gun) by following the above directions for semi-automatic fire, with the exception that the fire control lever (30) is set for full-automatic fire, i. e., with the fire control lever (30) pointing forward or towards the muzzle. In firing full-automatically it is well to remember that the prescribed method is by bursts of a few shots at a time, that is, by pulling the trigger until you have fired three to ten shots and then releasing the trigger. This method is called full-automatic fire by bursts. After each burst of fire rearrange aim and continue in this manner as may be desired.

In order to insert magazines, to set the

safety lever (31) or to set the fire control lever (30) the bolt must be in its rearward or retracted position in all cases.

POSITION. The standing position when firing full-automatically is very important. The left foot is well advanced. The left knee is bent with the weight of the body leaning forward, resting on the left foot. The trunk of the body is twisted or turned, thus pushing the right shoulder into the direction of the fire, and the right shoulder is humped and tense. It is as if a man was trying to push an automobile, that had been stalled along the road, with his right shoulder. The resistance when fired full-automatically is not great and surprisingly small with the *Cutts Compensator, but the right shoulder must be pushed into the gun by turning the trunk at the hips and humping the shoulder. A few trials will give remarkable results to anyone who is at all acquainted with shooting. The recoil is very slight but the rapid accumulation of these slight recoils in full-automatic fire will tend to push the operator backward, if he is not well braced for the thrust and will consequently affect the accuracy of fire. The prone position (lying down) is better for accuracy of fire.

In firing from the box magazine the bolt will automatically be held in the open position when the last shot has been fired therefrom. In both drum magazines the bolt closes on the empty chamber after the last shot has been

* Cutts compensator is a special device fitted on end of guns to decrease the tendency of muzzle rising. It is furnished on guns specially fitted for same on order.

PLATE V

Type L (50-cartridge) and Type C (100-cartridge) drum magazines shown assembled above, and with covers removed and properly loaded below. The box magazine (Type XX 20-cartridge) is shown in center, empty and loaded.

fired and a rattling noise can be heard in these magazines which indicates they are empty.

Loading of Magazines (See Plate V)

Box Magazines

The normal capacity of a box magazine is 20 cartridges. It may be possible to force an extra cartridge into the magazine, but this should be avoided.

The cartridges feed into the magazine with ease and without binding. If for any reason excessive force is required to feed the cartridges out of the magazine, the energy of the bolt is taxed to such an extent that a misfire may result. The forward edge of the magazine is rounded to prevent loading cartridges backward.

The lips of the mouth of the box magazine should be a distance of .55-inch apart. If by accident the magazine mouth should become deformed, the lips should be carefully bent back to this dimension.

Drum Magazines (See Plate V)

To load a drum magazine, remove the winding key by lifting the flat spring thereon and sliding the key off. The cover can then be removed. Place the cartridges, bullet up, into the spiral track of the body, beginning with a full section at the mouth. The simplest method to begin loading is to fill one outer section and then rotate the rotor until this section reaches the mouth. Thereafter, continue to fill successive sections until the end of the spiral track has been reached. *Fill each section complete; do not skip any section*

and do not fill beyond the end of the spiral track.

In order to obtain a capacity of 100 cartridges in the Type C magazine, a cartridge should be placed in each of the four fingers preceding the mouth.

Plate IV shows the magazines properly filled. **Follow closely the arrangement of cartridges shown.**

After the magazine is properly filled replace the cover and key and wind to the number of clicks indicated on the magazine nameplate.

Caution: Drum magazines when wound to the number of clicks indicated on their cases, namely, nine clicks for 1928 U. S. Navy Model Guns and eleven clicks for Model 1927 Carbines and Model 1921 Submachine Guns, should not be re-wound after many shots have been fired. That is to say, a loaded magazine which has been wound up should not be fired a few shots and then rewound, as the resultant strong spring tension will both interfere with surety of action of the gun, as well as incurring the possibility of breaking of the main spring of magazine.

PRECAUTIONS

1. It is deemed advisable to habitually set the gun at the "Safe" position while changing the magazines and during lulls in firing.
2. Do not attach loaded magazine until you are ready to fire. See that the magazine is loaded and attached properly.
3. When getting ready to fire semi-automatically make certain your fire control lever (30) is set to "single" and your safety (31) to "safe" before attaching magazine. Just before

you are ready to fire raise gun to shoulder and set safety (31) to "fire" position; in other words, when the lever is pointing forward. Apply the same precautions for full-automatic fire making sure of the desired position of the fire control lever (30).

4. Do not place the trigger finger within the trigger guard until you are ready to fire and have the gun pointed toward the target.

5. When you stop firing set the safety (31) to "safe"; remove the magazine by pressing up with your right thumb on the magazine catch handle. Grasp the magazine in the left hand when it is released by raising the magazine catch (22). In an emergency where great speed of fire is desired and it is necessary to quickly replace the magazine with another the box magazine will fall to the ground of itself upon the release of the magazine catch (22). See that there are no cartridges in the chamber before you turn from your firing position.

6. When not in operation the bolt should be closed, i. e., in its forward or uncocked position, *but closed on an empty chamber.*

7. Each time before firing, reassure yourself as to the type of fire that is desired, whether full-automatic or single shot and make certain that the fire control lever (30) is set accordingly.

8. Make it a practice to see that chamber is clear by looking through ejection opening.

9. For anticipated action carry the gun with bolt cocked (retracted) and safety on. Otherwise bolt should be left in closed position on empty chamber, to relieve strain on recoil spring. *To close bolt on empty chamber, re-*

move magazine and let bolt go forward slowly by retarding actuator knob with left hand. Unless magazine is removed, the bolt if released will fire cartridge from loaded magazine AS THIS GUN FIRES ON THE FORWARD STROKE OF THE BOLT.

10. For night operation, remember that with both the safety (31) and fire control lever (30) in forward direction the gun is ready for full-automatic fire.

11. Do not snap bolt on empty chamber unnecessarily.

12. In single shot fire release the trigger quickly after each shot to reengage the sear, as each pull of the trigger delivers but a single shot.

13. When firing full-automatically fire in bursts of three to ten shots.

MALFUNCTIONS

In case of a misfire, due to faulty ammunition or otherwise, retract or cock the bolt with a sharp quick pull on the actuator knob. This should insure ejection of the misfired cartridge.

In case of any other malfunction, retract the bolt as above and clear the throat and chamber of the gun by turning the gun over on its side and letting the case or cartridge roll out. If necessary remove the magazine quickly and the cartridge or case will fall out from the bottom. While manipulating the gun under these circumstances it is deemed highly advisable to always set the gun at "Safe."

Remember you must first cock the piece by pulling the actuator handle all the way back before inserting magazines or setting the fire control and safety levers.

Part III

AMMUNITION AND BALLISTICS FOR CALIBRE .45 THOMPSON SUBMACHINE GUN MODELS 1921 and 1928

The United States Army automatic service pistol model of 1911 fires calibre .45 pistol ball cartridges with a bullet weighing 230-grains. This is also standard ammunition for the Thompson Submachine Gun, calibre .45, models of 1921 and 1928. The Thompson Submachine Gun, Model 1921 only, also functions equally well wtih commercial calibre .45 Colt automatic pistol cartridge, the bullet of which weighs 200-grains. The 200-grain bullet gives a slightly increased velocity but is not as accurate at the longer ranges in this gun.

There is also provided for use in the calibre .45 Thompson Submachine Gun models of 1921 and 1928 Peters-Thompson birdshot cartridges calibre .45. Each cartridge contains 120 number 8 birdshot. These cartridges are slightly longer than the regular pistol ball cartridges and require a special box magazine similar to the type XX 20-capacity cartridge magazine provided for the pistol ball ammunition, except they are a little longer to accommodate the slightly increased length of the Peters-Thompson cartridge. The Peters-Thompson shot cartridges and magazines are used in the Thompson Submachine Guns without any changes or alterations being necessary except to use special magazine. The extreme range of the Peters-

Thompson shot cartridge is about 150 feet. They give a spread of a circle about six feet in diameter at a range of 50 feet. **In loading the Peters-Thompson cartridge into special box magazine care must be taken to exert no pressure on paper carton bullet portion of cartridge. The pressure to load cartridges into magazine must be placed on the metal case.**

The regular Colt calibre .45 pistol ball cartridges of either the military or commercial design can be readily purchased from representatives of the leading cartridge manufacturers of the United States such as the Remington Arms Company, 25 Broadway, New York City; The Peters Cartridge Company, Cincinnati, Ohio; Winchester Repeating Arms Company, New Haven, Conn.; U. S. Cartridge Company, 111 Broadway, New York City and Western Cartridge Company, East Alton, Ill. The Peters-Thompson shot cartridge is made by The Peters Cartridge Company. In case ammunition cannot be secured with facility the Auto-Ordnance Corporation, 302 Broadway, New York City, will gladly furnish same or give information enabling the purchaser to secure his ammunition for Thompson Submachine Gun with the least possible delay.

It is also to be noted that the Thompson Submachine Gun mechanism can be made up in quantities on special order for higher powered and pressured ammunition than indicated here, when desired. The Thompson Submachine Gun mechanism can also be furnished to fire high powered military service ammuni-

tion, the guns of this type usually being provided with bipods and being of heavier weight.

Sight Setting

The sight on the Thompson Submachine Gun, Models 1921 and 1928, is graduated for the 230 grain bullet ammunition.

When firing the 200-grain bullet ammunition the following sight settings should be used:

For 100 yards, set at 80 yards.
200 yards, set at 175 yards.
300 yards, set at 270 yards.
400 yards, set at 365 yards.
500 yards, set at 460 yards.

The windage graduation is such that one unit of graduation will give a correction of one foot on a one-hundred-yard target.

Sight Correction for Elevation

Correction on sight in decimals of an inch for one foot elevation on target at ranges indicated for standard 22.3-inch sight radius.

Range, Yards	Sight Correction, Inch
50	.148
100	.074
200	.037
300	.024
400	.018
500	.014
600	.012

Following tables give the height of the trajectory and drifts of the 230-grain and of the 200-grain bullet.

Height of Trajectory Above Line of Sight for Standard Ammunition

	Height of Trajectory at Points Indicated									
RANGE Yards	50 Yds.	100 Yds.	150 Yds.	200 Yds.	250 Yds.	300 Yds.	350 Yds.	400 Yds.	450 Yds.	500 Yds.
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
230-grain bullet 100	.40	0								
230-grain bullet 200	1.40	1.90	1.55	0						
230-grain bullet 300	2.55	4.25	5.00	4.60	2.95	0				
230-grain bullet 400	3.95	7.00	9.20	10.12	9.80	8.20	4.90	0		
230-grain bullet 500	5.58	10.20	14.00	16.50	17.70	17.60	15.86	12.50	7.15	0
200-grain bullet 100	.40	0								
200-grain bullet 200	1.22	1.65	1.35	0						
200-grain bullet 300	2.30	3.75	4.40	4.08	2.72	0				
200-grain bullet 400	3.50	6.25	8.12	9.05	8.90	7.35	4.52	0		
200-grain bullet 500	4.90	9.05	12.30	14.55	15.75	15.58	14.03	10.85	6.00	0

Table of Drift

	Drift to Right of Line of Bore of Gun at Points Indicated									
AMMUNITION	50 Yds.	100 Yds.	150 Yds.	200 Yds.	250 Yds.	300 Yds.	350 Yds.	400 Yds.	450 Yds.	500 Yds.
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
230-grain bullet..	0	.10	.25	.50	.85	1.40	2.30	3.25	4.50	5.90
200-grain bullet..	0	.15	.35	.75	1.35	2.15	3.15	4.35	6.10	8.05

Table of Penetration

The remaining energy of the bullet at the various ranges is shown in the following table in which the figures show the number of ¾ inch yellow pine boards spaced one inch apart, that were penetrated by bullets from the firing points indicated.

	Number of ¾ inch boards penetrated from firing points indicated:					
Ammunition	Point Blank	100 Yards	200 Yards	300 Yards	400 Yards	500 Yards
230-grain bullet.....	6¾	6	5¼	4½	4	3¾
200-grain bullet.....	6¾	5¾	5	4¼	3¾	3¼

U. S. Government Frankford Arsenal cal. .45 Tracer Cartridges are used in conjunction with regular 230 grain bullet cartridges to indicate ranging of shots at the longer ranges from 350 to 600 yards. Tracer cartridges are not sold commercially in small lots.

NOTE: Do not use commercial cartridges with 200 grain bullets in Model 1928 guns.

Part IV

GENERAL DESCRIPTION OF GUN AND OPERATING PRINCIPLE

(Note numbers correspond to parts shown on Plates II and III, pages 5 and 6.)

The gun is composed of two distinct groups: the *Receiver* (27) with the parts attached thereto and contained therein, and the *Frame* (15) with its attached and contained parts.

The Receiver Group

The receiver (27) forms the skeleton of the gun and has the barrel (2) screwed thereon. Immediately beneath the barrel (2), at the front end of the receiver (27), is anchored the fore grip mount, to which is secured the fore grip (13). The fore grip mount (18) is held in place by the barrel (2).

The receiver (27) immediately to the rear of the barrel (2) is provided with an opening for magazines and with a bolt well. Beyond the magazine opening is a uniform enlarged cavity which contains the body of the bolt (3), with recoiling space for the same, also the recoil spring (28) and buffer (5).

The bolt (3) consists of a rectangular body portion which fits into the cavity in the receiver (27), and a round forwardly projecting portion which fits into the forward bolt well of the receiver (27). The forward end of the bolt (3) being of a reduced size permits the magazine to be brought up in close proximity

to the chamber and as near as possible to the axis of the bore.

The lock (21) consists of an "H" member with lugs extending on each side thereof. The sides of the lock (21) engage with the bolt, (3), and the lugs thereon engage with grooves in the receiver (29). The central bar is engaged by the actuator (1) for control by the recoil spring (28) and for manual operation.

The surfaces between the bolt (3) and lock (21) are at an angle of 70 degrees to the axis of the gun, and the surfaces between the lock (21) and receiver (27) at an angle of 45 degrees to the axis, so that there is formed on the lock (21) an intercepted angle of 25 degrees between the bolt (3) bearing and receiver (27) bearing surfaces of the lock (21).

The explosive pressure of the cartridge is transmitted through the forward end of the bolt (3) to the lock (21), and through the lock (21) to the locking surfaces of the receiver (27). The bolt (3) is limited in its forward travel by the abutment on the forward end of the rectangular section of the bolt (3) abutting against the corresponding abutment in the receiver (27). In the portion of the bolt (3) between this abutment and the lock (21) is pivoted a hammer (19) in the form of a reversed lever. The lower end of this hammer (19) strikes the abutment in the receiver (27) slightly in advance of the bolt (3). The upper end of the lever contacts with the firing pin (11) which extends through the round forward portion of the bolt (3) to the cartridge seat and is held in rearmost position by the firing pin spring (12). The hammer (19) is so con-

structed that it will strike the abutment of the receiver (27) and cause the discharge of the cartridge only when the bolt (3) is completely locked.

The actuator (1) rests slidably on top of the bolt (3) and engages the cross-bar of the lock (21) with two fingers; the rear finger also engages the forward end of the recoil spring (28). The cavity in the rectangular portion of the bolt (3) forms a housing for the recoil spring (28), and the buffer (5) serves as an arbor therefor. The buffer (5) consists of a cylindrical tube closed at the forward end and having a flange at its rear end. This flange furnishes a seat for the rear end of the recoil spring (28) and a buffing abutment for the rear end of the bolt (3). The buffer (5) is mounted on the buffer pilot (6); a column of fiber discs is interposed between the forward end of the buffer (5) and the buffer pilot (6), so that all pressure or shock on the buffer (5) is transmitted to the buffer pilot (6) through these buffing discs. The buffer pilot (6) has a flange which seats against the rear end of the receiver (27) and is held in place by its prolonged end of reduced diameter fitting into a hole in the receiver therefor.

Held in place by the buffer pilot (6) and extending forwardly in undercuts in the receiver is a breech oiler (4) formed of spring steel which holds oil saturated felt pads to relubricate the locking lugs on the lock (21) at each recoil of the bolt (3). These pads also tend to keep the sides of the bolt (3) lubricated.

The principle of bolt action is this, that

during the period of high chamber pressure the lock (21) is fixed in position by adhesion of its surfaces and moves to clear the locking surfaces in the receiver (27) only after the high pressure in the chamber has subsided. The angle of the lock (21) is so chosen that at the moment the lock (21) is moved clear of the receiver locking surfaces, there is only sufficient residual powder pressure in the chamber to blow the cartridge case and the bolt (3) rearwardly, eject the empty case and impart sufficient inertia to the bolt (3) to completely compress the recoil spring (28) and prepare the bolt (3) for a new cycle of operation. On its forward movement, under impluse of the recoil spring (28), the bolt (3) feeds a cartridge from the magazine into the chamber and as the bolt (3) approaches its foremost position, the lugs on the lock (21) engage the forward surfaces of the receiver (27) locking grooves, which in conjunction with the recoil spring (28) pressure on the lock (21) through the actuator (1), drives the lock (21) downwardly into locked position.

The receiver (27) is provided on the right side with an ejection opening in a plane 30 degrees above the horizontal. In this same plane the forward end of the bolt (3) is provided with an extractor (10) secured by an undercut and limited in horizontal movement by a stud. The extractor (10) is retained in its assembled position under its own spring tension.

The opposite side of the receiver (27) is provided with an ejector (9) which is screwed into place and secured in position by a projec-

tion on the end of a spring leaf engaging with a detent on the receiver (27). The ejector (9) extends into the path of the bolt (3), a clearance cut on the bolt (3) being provided therefor.

At the rear end the receiver (27) is provided with a projection which contains the frame latch (16) and frame latch spring (17). This member locks the frame (15) to the receiver (27) when the former is assembled thereto.

The parts thus far mentioned comprise the receiver group, which with the exception of the fore grip mount (18), the fore grip (13) and screw (14), and frame latch (16) with its spring, composes the working parts of the gun.

The Frame Group

The frame (15) houses the entire trigger mechanism, furnishes a seat for the rear grip (25), an attachment for the box magazine, and contains a catch to hold the latter in place. The rear projection of the frame (15) is also provided with a guideway, to which the butt stock can be attached.

Of greatest importance in the trigger mechanism group is the sear (32) which under impulse of the sear spring (33) engages one of the sear notches in the bolt (3) when the latter is in retracted position. The trigger (36) is mounted in the frame (15) forwardly of the sear (32), and carries pivotally mounted on a rearward projection thereon the disconnector (7), which under impulse of the disconnector spring (8) is continually urged toward the sear (32). The forward portion of the trigger

(36) houses trigger spring (37), which urges trigger (36) to its normal released position.

Surrounding the upper portion of the trigger (36) and mounted on the same pivot, the trip (38) extends forwardly into the path of the box magazine follower, and rearwardly over a forwardly projecting member of the disconnector (7). The relation of trip (38) to disconnector (7) is such that when trigger (36) is pulled, the trip (38) (when the last shot has been fired from the box magazine) will be lifted by the follower of magazine and will move disconnector (7) away from sear lever (34), thus allowing sear (32) to engage bolt (3) to hold it "open."

Between the sear (32) and the disconnector (7) is interposed the sear lever (34) mounted on the same pivot with the sear (32). The sear lever (34) is urged downwardly by the sear lever spring (35). The disconnector (7) when moving upwardly, by a pull on the trigger (36) lifts the sear lever (34), and the sear lever in turn lifts the forward projection of the sear (32), causing the rear projection to become depressed and disengaged from the bolt (3). The bolt (3) is then free to move forward under impulse of the recoil spring (28) and will reciprocate in automatic action until the cartridges are exhausted, or the trigger (36) is released, or the bolt (3) is arrested in its retracted position by the action of the follower of the box magazine on the trip (38) when the last cartridge has been fed from the box magazine. In this last-mentioned instance the disconnector (7) will be disconnected from the sear lever (34), which will be free to re-

sume its normal position and will in turn allow the sear (32) to re-engage the bolt (3).

Between the trigger (36) and sear (32) there is provided a rocker pivot (30) which carries a rocker (29) mounted on an eccentric portion thereof. This rocker (29) extends upwardly when the rocker pivot (30) is set for "automatic" or "Full-Auto" position to within a very short distance of the bolt (3). The forward edge of the rocker (29) rests against the disconnector (7). When the rocker pivot (30) is rotated through an arc of 180-degrees to the "semi-automatic" or "single" position, the eccentric axis of the rocker pivot (30) causes the rocker (29) to project upwardly into the path of the bolt (3). There is provided on the bottom of the bolt (3) a groove to clear the rocker (29), of such length that the rear wall of this groove will strike the rocker (29) at the final stage of the forward movement of the bolt (3), imparting to the rocker (29) sufficient movement to cause it to throw the disconnector (7) forwardly and disengage same from the sear lever (34). The sear lever (34) immediately under impulse of the sear lever spring (35) assumes its normal position, leaving the sear (32) free to engage the bolt (3) in retracted position.

The function of the sear lever is this: That as the bolt (3) has reached its forward position and has caused the rocker (29) to disengage the disconnector (7) from the sear lever (34,) if the sear lever (34) were not free to move downward, the disconnector (7) might re-engage the sear (32) when the bolt (3) starts rearwardly on its recoil, and the sear

(32) would then not be free to re-engage the bolt (3).

The position of the rocker (29) controls the nature of fire of the gun, whether full-automatic or single shot. *The rocker pivot* (30) *can be turned from "automatic" or "full-auto" to "semi-automatic" or "single" position, only when bolt* (3) *is retracted.*

It can be turned in the reverse direction with the bolt (3) closed, but to avoid confusion the bolt (3) should always be retracted when setting the rocker pivot (30) in either direction.

The safety (31) is mounted at the rear end of the sear (32). It consists of a cylindrical body with its central portion halved to clear the sear (32). The sear (32) is provided at the rear end with a half hole to engage the safety (31). When the safety (31) is turned to "safe" position it engages the sear (32) so that the latter is positively blocked against movement. When the safety (31) is turned to "fire" position, the half section of its body is rotated out of engagement with the sear (32) and the sear (32) is free to move.

The safety (31) can be turned to "safe" position only when the sear (32) is in engagement with the bolt (3) in its retracted position. Obviously since this is an open chamber gun, that is, the bolt (3) when released by the trigger pull loads and immediately fires the cartridge, the gun with the bolt (3) resting in forward position is completely inactive.

The pivot pin (24) for the trigger (36) and trip (38), and the pivot pin (24) for the sear (32) and sear lever (34) are both secured to a

spring plate, which is provided with projecting spring fingers engaging grooves on the safety (31) and the rocker pivot (30), retaining these parts in assembled position.

The forward end of the frame (15) is provided with a dovetail cut, which engages a corresponding dovetail member of the box magazine. On the side of the frame (15) is pivoted the magazine catch (22) urged into engagement with the magazine by a torsion spring. This magazine catch (22) engages the box magazine by a stud extending forwardly through the center of the trigger guard; and also holds the drum magazines in position by the engagement of its forward edge with a notch on these magazines.

The rear grip (25) is secured to the frame (15) by means of the rear grip screw (26). The frame (15) is assembled to the receiver (27) by undercut ways engaging corresponding ways on the receiver (27). When the frame (15) is in foremost position on the receiver (27) the frame latch (16) pocketed at the rear end of the receiver (27) is free under impulse of the frame latch spring to project downwardly into engagement with the frame (15), locking same to receiver (27).

Magazines (See Plates IV and V)

The *Box Magazine* has a capacity for twenty cartridges in double column. It consists of a formed sheet metal body with a dovetail projection on its rear edge for engagement with the frame and a hole therein for engagement with the magazine catch. This rearwardly ex-

tending dovetail also furnishes a path for a rear projection on the follower for contacting with the trip to cause the bolt to be held open when the last shot is fired from the magazine.

The follower serves as a table for the cartridges in the magazine and is urged upward by the magazine spring, which is supported at the bottom of the magazine by the floor plate. This magazine consists of the four parts mentioned: the body, follower, magazine spring and floor plate.

The Drum Magazines, Type L and Type C, consist of circular pan-like bodies provided with covers. Rotatably mounted on a hub within the magazine is a rotor to which is attached a spring case housing a motor spring. To a flange on the hub is attached a ratchet consisting of a circular disc, so cut that four fingers are formed thereon and given a curvature to project beyond the plane of the ratchet. These fingers of the ratchet engage with inwardly protruding edges formed in the body of the magazine in such a manner that the fingers of the ratchet will pass over the projections when the hub is rotated in winding direction, and will abut on these projections when the hub is turned in opposite direction. The motor spring is fastened on its inner end to the hub, and on its outer end to the spring case.

The relation of these parts is such that when there are cartridges in the magazine, so that the rotor is not free to rotate, and the hub is turned in a feeding direction, the motor spring will become wound up and the fingers on the ratchet engaging the projections on

the body will hold the hub from unwinding. The energy of the motor spring is then exerted through the spring case to the rotor to urge the cartridges to the mouth of the magazine.

Both the body and the cover of the magazine are provided with guide strips which form a spiral path for a train of cartridges placed parallel to the axis of the hub. The rotor is provided with radial fingers which occupy the space in the magazine between the guide strips of the body and the cover. These fingers are so constructed that they intercept the spiral train of cartridges in such a manner that all the sectors are of equal length; that is, the distance between fingers on the inner row of the spiral train is the same as on the outer row of the spiral train. In this manner a group of cartridges between fingers on the inner spiral train occupy the same space between fingers on the outer row of spiral train; the cartridges throughout the train being at all times held compactly to prevent them from tumbling. In the larger magazine of the two (Type C) the fingers of the rotor at their extreme end are of such width that a pocket is provided therein for a cartridge in the outer path of the spiral train.

The magazine body and cover are provided with an opening which forms the mouth of the magazine; the train of cartridges is here arrested by deflectors which guide each cartridge upward into the mouth ready for feeding into the chamber. The body and cover are also provided with side plates secured on the opposite sides which engage guideways therefor in the receiver for attaching the magazine

thereto. The side plate on the magazine body is provided at the bottom with a notch for engagement with the magazine catch to hold the magazine in position on the gun. The hub is secured to the magazine body with a spring clip. The cover is secured by a winding key which fastens to the end of the hub and by means of which the motor spring is wound.

The drum magazines are of two sizes: Magazine, Type L, of a 50-cartridge capacity, and Magazine, Type C, of a 100-cartridge capacity. (Type C is not made for Model 1928.)

Sights

Sights are provided for use in connection with the butt stock to fire the gun from the shoulder.

The *front sight* consists of a one-piece member secured to the front end of the barrel with a pin.

The *rear sight* consists of a base which is riveted to the top of the receiver. The base is provided with side walls to protect the sight. It has a central housing for the plunger and plunger spring, and at its rear end it carries the sight leaf pivotally mounted thereon. The pivot end of the leaf is cylindrical and is provided with "V" slots for engagement with the plunger under pressure of the plunger spring. These "V" slots are so located that the plunger engages therewith when the leaf is in the "up" or in the "down" position and serves as a detent to hold the leaf in these two positions.

On the leaf is mounted a slide which is held in position by a small studded leaf spring secured on the edge thereof, the stud engag-

ing with serrations on the edge of the leaf. Projecting from the slide is a forward wall notched for a battle sight and two lateral lugs which support a windage screw. This windage screw carries the eyepiece which extends below the slide. The eyepiece has an opening for a field view and an aperture for sighting. The upper end of the eyepiece is provided with a suitable edge for carrying an index mark for windage adjustment. Immediately above this edge on the battle sight wall is the windage graduation.

Butt Stock

To fire the gun from the shoulder there is provided a butt stock which can be readily attached to the frame, a catch locking the same in place.

The butt stock consists of a black walnut body. A slide which fits the frame of the gun is secured to the front end of the body by means of two screws. On this slide is mounted the catch to lock the butt stock to the frame.

At the butt end the stock is provided with a pocket for an oil can, and a butt plate is secured thereon with two wood screws. The butt plate is provided with a small circular hinged cap which serves as a door to the oil can pocket.

Part V

DIRECTIONS FOR DISMOUNTING AND ASSEMBLING

TO DISMOUNT

Read Precautions (a) and (b), page 45.

1. Remove Magazine

Remove magazine by pressing upward with right thumb on magazine catch.

2. Remove Frame from Receiver

Turn safety to "fire" position and rocker pivot to "automatic" or "full-auto" position. Pull the trigger and allow bolt to go forward gradually by retarding actuator with left hand.

Place gun upside down on knee or on a table, the barrel extending rearward, and steady against movement with the actuator knob. With thumb of left hand depress frame latch at rear end of the frame and with right hand tap frame sliding same rearward a short distance. Take the gun from table or knee, grasping rear grip in right hand, and grasping receiver with left hand *pull trigger* and slide frame off to the rear.

3. Remove Recoil Spring

Support muzzle of barrel on table or knee, with open side of receiver facing operator. Grasp receiver with left hand, with thumb in position to engage the buffer. With thumb of right hand press down on buffer pilot which projects beyond end of the receiver, and with thumb of left hand engage the flange of buffer. If the breech oiler follows, push same back

with the fingers of right hand. Holding the buffer and pilot down with thumb of left hand grasp the end of buffer pilot with thumb and forefinger of right hand and withdraw this entire unit from the receiver.

Care should be taken to obtain a firm hold on the spring, buffer and pilot to prevent the recoil spring (same being compressed) from springing out of operator's hand.

4. Remove Bolt, Lock and Actuator from Receiver

Grasp receiver bottom up with left hand. Slide the bolt into rearmost position and withdraw.

Slide actuator with lock to foremost position and remove lock through inclined locking grooves in receiver.

Then again slide actuator to rearmost position and withdraw same.

5. Remove Ejector and Breech Oiler from Receiver

The ejector can be removed by lifting the leaf sufficiently to disengage the detent and unscrewing the same from receiver. The breech oiler can be removed by pressing its fingers together to clear undercut of the receiver. These two parts, however, need not be removed for ordinary cleaning purposes.

6. Remove Safety, Rocker Pivot and Rocker from Frame

Using the end of the actuator as a tool in the right hand depress the short finger of the

pivot plate and withdraw the rocker pivot; then remove the rocker.

Again using the actuator, but steadying the hand with thumb against trigger guard to prevent excessive movement, depress the long finger of the pivot plate and withdraw safety.

7. Remove Pivot Plate and Firing Mechanism from Frame

Hold frame upright with the grip in right hand. Press simultaneously with both thumbs on the two pins of pivot plate. These pins project sufficiently far so that by a quick pressure thereon the body portion of the pivot plate will extend on the other side far enough to enable grasping same with fingers for withdrawal.

While withdrawing pivot plate with right hand, press down on the trigger and sear with left thumb to release pressure of springs on pivot pins to facilitate withdrawal.

The remaining components of the firing mechanism are then free to be removed. The disconnector can be removed from the trigger by simply withdrawing same.

8. Remove Magazine Catch from Frame

If required the magazine catch can be withdrawn from frame by rotating same counterclockwise to its limit. Except for good reasons the magazine catch should not be removed, to avoid unnecessary straining of the magazine catch spring.

9. Remove Firing Pin

Drive hammer pin out of bolt from left side; the hammer, firing pin and firing pin spring will

then tend to spring out under impulse of the firing pin spring. Caution should be exercised to prevent these parts from springing away and becoming lost.

10. Remove Extractor from Bolt

With a cartridge case or some other means lift the extractor head sufficiently for the stud to clear its seat and withdraw by pulling forward. Caution shoud be exercised not to lift the extractor head excessively to prevent setting.

TO ASSEMBLE

Read Precautions (c) and (d), page 45.

1. Assemble Trigger Mechanism

First see that magazine catch is in assembled position.

Assemble disconnector to trigger by depressing disconnector spring and sliding disconnector into place.

Place trigger, trip, sear and sear lever into their respective positions in frame, making sure that forward end of sear lever rests on top of the disconnector. To align these parts press downward with end of left thumb on trigger and with base of thumb on sear. Insert the pivot plate and to avoid binding apply gentle pressure with ball of right hand over entire pivot plate.

2. Assemble Safety, Rocker and Rocker Pivot

Insert safety from left side of the frame. With the actuator in the right hand, steadying same carefully to avoid excessive movement,

depress the long finger of pivot plate and push safety home. Turn safety to "fire" position.

Place the rocker in position in frame with flat side against sear lever. Insert rocker pivot from the left side of frame. With actuator depress the short finger of pivot plate and push rocker pivot home. Turn rocker pivot to "automatic" or "full-auto" position.

3. Assemble Ejector to Receiver

Screw ejector into receiver until stud on leaf engages and seats in depression therefor. *Do not screw or unscrew ejector while bolt is in closed position.*

4. Assemble Extractor to Bolt

Slide extractor into place, lifting head to clear stud.

5. Assemble Firing Pin

Place firing pin into firing pin spring and slide same into front end of bolt. Place the hammer in position, with rounded edge upward, and drive hammer pin into place.

6. Assemble Actuator, Lock and Bolt to Receiver

Grasp receiver, bottom up, with left hand and insert actuator with knob to the front. Slide actuator to its foremost position. Introduce lock by engaging the lugs thereon in the locking grooves of the receiver, taking care that the arrow on the cross-bar of the lock is pointing toward muzzle of the gun with word "up" reading correctly from rear.

Again slide the actuator with lock all the way to the rear and place the bolt into position.

7. Assemble Recoil Spring, Buffer and Pilot

Slide bolt forward and rest muzzle of barrel on table or knee, grasp receiver with left hand and with right hand introduce recoil spring with buffer and buffer pilot. Push recoil spring down into bolt and let buffer pilot find its seat in receiver and snap into place.

8. Mount Receiver on Frame

Grasp the frame with right hand in normal position, making sure that the safety is set at "fire" and the rocker pivot at "automatic" or "full-auto." Slide frame on to receiver and at same time pull the trigger. The frame latch will lock the frame in position and the gun is now ready for action.

9. Attaching Magazine

See Precaution (g), page 45.

The box magazine is attached by engaging the dovetail thereon with the dovetail groove in the forward end of the frame and moving magazine upward until caught by the magazine catch.

Drum magazines are introduced and removed from left side of the gun. They are held in place by the magazine catch. *When removing or attaching a drum magazine be sure that the bolt is retracted.*

Precautions on Dismounting and Assembling

(a) See that bolt is forward and rocker pivot set at "automatic" or "full-auto" before attempting to dismount frame from receiver. Rocker pivot must also be set at "automatic" or "full-auto" and safety at "fire" when assembling frame to receiver.

(b) *Do not remove pivot plate until frame has first been removed from receiver.* If this precaution is disregarded serious difficulties may be entailed.

(c) When assembling or removing extractor to or from bolt, do not lift extractor higher than necessary for lug to clear anchorage hole, to prevent setting or breaking of extractor.

(d) When assembling or removing ejector from receiver, make sure that bolt is not in closed position, as the ejector head engages with the ejector slot in front end of bolt.

Do not lift ejector leaf higher than necessary for disengaging stud with depression in receiver, to avoid setting or breaking of leaf.

(e) When assembling or removing safety and rocker pivot, do not depress fingers on pivot plate more than necessary, to prevent setting or breaking.

(f) Do not remove breech oiler unless necessary.

(g) Do not remove magazine catch unless necessary. (The magazine catch can be assembled or removed only with the pivot plate partially withdrawn.)

Part VI

DIRECTIONS FOR CARE AND PRESERVATION

Keep the gun well cleaned and oiled.

It is important that the gun be thoroughly cleaned after each day's firing regardless of the number of shots fired. Not only should the bore and chamber of the barrel be cleaned, but also all parts and all surfaces of the receiver, bolt, ejector and extractor that are contacted with the powder gases.

For this purpose the frame should be removed from the receiver and the bolt should be taken out to thoroughly clean the front end thereof and the extractor. It may also be desirable to remove the extractor. The bolt-well and the throat of the receiver, as well as the ejector head, are readily accessible.

To prevent rusting as a result of the impregnation of powder gases a saturated solution of sal soda water, consisting of one-quarter pound of sal soda per pint of water, can be used. Cloth patches soaked in the sal soda solution should be thrust through the bore with the cleaning rod, and the receiver and bolt surfaces affected should be wiped with a cloth saturated in the soda solution. Thereafter, all parts should be thoroughly dried and well oiled.

Instead of the soda solution for cleaning purposes, *gasoline* has been found to give good results.

In both cases, however, whether soda or gasoline is used, it is important that the parts be wiped dry after the wash and thoroughly oiled.

With the exception of the magazines, it is not necessary to give the remaining parts of the gun a thorough cleaning after each firing, unless many hundred shots have been fired and it is desired to remove all powder residue or other accumulated dirt. The magazines should be treated and kept clean similar to the gun parts affected by powder gases, *and kept well oiled inside.*

The cleaning rod accompanying the gun should be used in cleaning the barrel. The tip of this cleaning rod is of such diameter that it will accommodate one or two patches of flannel two inches square. Brass wire brushes, which screw directly on to the cleaning rod, are also furnished for cleaning.

Lubrication of Gun

Any good grade of light oil may be used for lubricating the gun.

To lubricate, the frame should be removed from the receiver. Oil should be dropped over the pivot points of the trigger and trip, and the sear and sear lever; also over the disconnector and rocker.

Holding the receiver in the left hand, open side up, the bolt should be slightly retracted and oil should be dropped on the locking lugs of the lock, on the sides of the lock and on all sliding surfaces of the bolt and receiver.

The felt pads in the breech oiler should be kept well saturated with oil.

After reassembling the frame to the receiver the bolt should be retracted and a little oil should be dropped on the rounded front end of the bolt. The actuator knob should be worked back and forth several times to insure penetration of the oil to all parts of the mechanism.

All sliding surfaces should be oiled frequently and freely to insure perfect functioning of the gun.

Keep the chamber cleaned and oiled. Although the Thompson gun is less affected in its operation by powder residue than any other known automatic arm, the careful machine gunner will *use the breech-cleaning bristle brush to clean and oil the chamber* at reasonable intervals in extended firing, to facilitate the extraction of fired shells and to prevent pitting and rusting. It is not necessary to dismantle the gun for this purpose.

Lubrication of Magazines

The box magazine should have its inner sliding surface well oiled to avoid friction and to prevent rusting.

The drum magazines are assembled with an abundant supply of vaseline in the spring case but the hub bearings and the surfaces forming the spiral track *in both body and cover* should be *kept well oiled* to avoid friction and to prevent rusting.

Part VII

DATA

1.—Table of Weights

	Pounds
Gun complete with sights (without magazine or butt stock)	8.5
Five box magazines (empty)	2.0
One Type L drum magazine (50-cartridge), empty	2.5
One Type C drum magazine (100-cartridge), empty	3.9
One butt stock	1.5
One web gun case	1.9
100 Cartridges (230-grain bullet)	4.6
2000 Cartridges (230-grain bullet), packed	110.0
Trigger pull	8 to 10

2.—Table of Dimensions

	Inches
Overall length of gun without stock	23.2
Overall length of gun with stock	31.8
Overall length of barrel	10.5
Length of bore	9.76
Rifling, right hand one turn in 16 inches.	
Heel of butt stock below top of receiver	3.3
Heel of butt stock beyond rear of receiver	8.6

3.—Magazines

Type XX box Magazine (20-cartridge)
1.0 by 1.7 by 6.2 inch.

Type L Drum Magazine (50-cartridge)
- Outside diameter ..... 6.65 inch
- Thickness of body ..... 1.40 inch
- Overall thickness ..... 2.17 inch

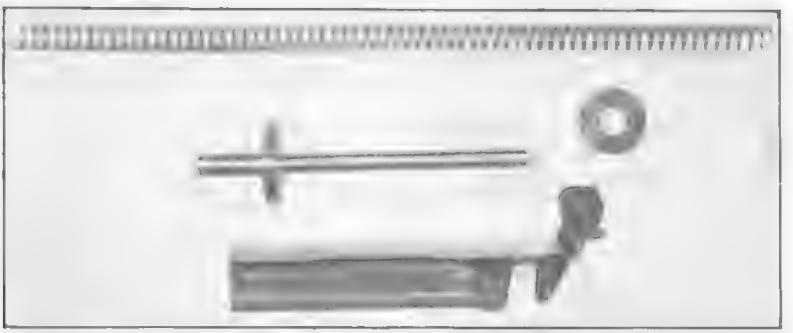
Type C Drum Magazine (100-Cartridge)
- Outside diameter ..... 8.63 inch
- Thickness of body ..... 1.40 inch
- Overall thickness ..... 2.17 inch

4.—Sight

Height of front sight above axis of bore..1.04 inch
Sight radius .....22.30 inches
Battle sight range .....50 yards

5.—Cartridges

Length of bullet:	
230-Grain bullet	.662 inch
200-Grain bullet	.582 inch
Length of case	.895 inch
Overall length of cartridge:	
230-Grain bullet	1.265 inch
200-Grain bullet	1.258 inch
Diameter of bullet (cylindrical portion)	.450 inch
Diameter of cartridge	.472 inch
Weight of bullet .....200 and 230 grains	
Weight of powder charge	5 grains
Weight of cartridge case and primer	89 grains
Weight of cartridge:	
230-Grain bullet	324 grains
200-Grain bullet	294 grains



SPARE PARTS FOR U. S. NAVY MODEL 1928

3. Top—Recoil Spring.
2. Center—Buffer Disc and Buffer.
1. Bottom—Actuator (weighted).

Part VIII

THOMPSON SUBMACHINE GUN

MODEL OF 1928

The outstanding characteristic of Model 1928 Submachine Gun, our U. S. Navy Model, is its slowed-down action. When used full automatic, Model 1928 fires at the rate of about 600 shots per minute, while the cyclic rate for Model 1921 is about 800 shots per minute.

Model 1928 Submachine Gun can be fired full automatic or semi-automatic. The principles of design are identical and the general instructions for Model 1921 apply equally to the Model 1928, except as noted. The slower action is accomplished by using a weighted actuator (1); the recoil spring (28) is of smaller diameter and inserted into a hole in actuator; the one-piece buffer (5) is complete with pilot and of smaller diameter and uses a fibre washer; the firing pin spring (12) is slightly shorter.

Ammunition and Ballistics: Model 1928 Submachine Gun is made for the .45 Colt Automatic Ammunition, and uses the regular ball cartridges (230 grain bullet cartridges only) also the shot cartridges and blank cartridges, as used in Model 1921. The instructions for sighting and the ballistic figures given for Model 1921 apply equally to the Model 1928.

Magazines: Model 1928 uses both 20-shot box magazines and 50-shot drum magazines. However, the Type XX (20 cartridge) box magazines are not identical for Model 1921 and

Model 1928 Submachine Gun—U. S. Navy Model.

Selective Action—Single Shots or Bursts of Automatic Firing

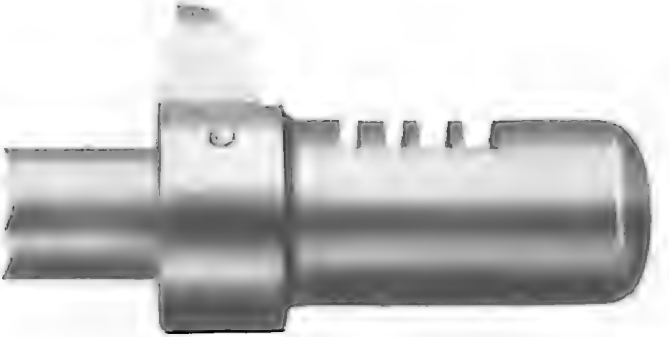
GENERAL SPECIFICATIONS: Calibre .45. Weight, 9 lbs. 13 ounces. Length, 33 inches. Length of barrel, with Compensator, 12½ inches; without Compensator, 10½ inches. Equipped with Lyman sights and wind gauge. 20 and 50 cartridge capacity magazines. Ammunition calibre .45 Colt Automatic Pistol Ball Cartridges (230 grain bullet cartridges only), and calibre .45 Thompson-Peters Shot Cartridges (both ball and birdshot cartridges can be used in one and the same gun but require different magazines). Rate of fire—Semi-automatic (a single shot for each separate pull of the trigger) up to the rate of 100 single aimed shots a minute—Full automatic 600 shots a minute.

Model 1928, and only those Type L (50 cartridge) drum magazines which are marked "Wind to 9 clicks" should be used with Model 1928 guns. When ordering magazines, be sure to specify model for which wanted.

Parts: When ordering parts, use the same names of parts as in Model 1921 as the parts are similar wth the following exceptions: Actuator (1); Buffer complete (5) with pilot and fibre disc; Recoil Spring (28) and Firing Pin Spring (12). State model number and type of foregrip and give gun serial number when ordering.

Illustration on page 52 shows Model 1928 Thompson Submachine Gun with horizontal foregrip, when *equipped with a Cutts Compensator,* and 50-shot drum magazine.

This shows how conveniently swivels and sling strap can be fitted to a gun with horizontal foregrip.



CUTTS COMPENSATOR

The Cutts Compensator on the Thompson gun is (see cut above) so constructed that the powder gases on coming to the muzzle are coned to higher pressures which are thrown out the orifices in the compensator in upward direction, pressing the muzzle downward, thus *decreasing the tendency of muzzle rising in automatic firing.* The compensator has a tendency also to reduce recoil.

In semi-automatic firing, the Cutts Compensator stabilizes the carbine and submachine gun, enabling *greater accuracy* of rapid firing.

To get full stabilizing effect of the Cutts Compensator, the gun must not be held too tightly against the shoulder.

Caution: To get the full effect of the compensator, it is recommended that the holes or orifices in its top be inspected to see that they are always open and not clogged with dirt, sand or clay.

SPARE PARTS FOR CARBINE MODEL 1927

(Reading left to right).

Top—Rocker, Rocker Plunger, Rocker Plunger, Spring and Rocker Pin.

Bottom—Rocker Pivot (altered).

Part IX

THOMPSON SEMI-AUTOMATIC CARBINE

MODEL OF 1927

(also called Model No. 27AC when equipped with Cutts Compensator)

The Thompson Semi-Automatic Carbine, Model of 1927, has the same automatic reloading principle as the Thompson Submachine Gun, but *fires only one shot for each separate pull of the trigger.*

Each shot is under full control by the operator, yet the fast reloading action permits firing up to 100 single aimed shots in one minute, when required.

Construction: The Model 1927 Carbine is in appearance similar to the submachine gun. While the weight of the submachine gun and carbine are about the same, and they have the same barrel and same over-all length and the same set of sights, there are differences in construction and adjustment so that *it is not practicable to convert the carbine into a submachine gun.* The parts which are different in construction are the frame, sear, sear lever, rocker, rocker plunger, rocker plunger spring, rocker plunger pin and rocker pivot.

Ammunition and Ballistics: Model 1927 Carbine .45 caliber is made for the .45 Colt Automatic Ammunition, and uses the regular ball cartridges (230 grain bullet cartridges only), also using the shot cartridges and blank cartridges, as used in Model 1921. The instruc-

Thomspon Semi-Automatic Carbine, Model of 1927

Trigger Pressed for Each Shot

GENERAL SPECIFICATIONS: Calibre .45. Weight about 9 lbs. 12 ounces. Length about 33 inches. Length of barrel with Compensator, 12½ inches; without Compensator, 10½ inches. Equipped with Lyman sights and wind gauge. 20 and 50 cartridge capacity magazines. Ammunition calibre .45 Colt Automatic Pistol Ball Cartridges and calibre .45 Thompson-Peters Shot Cartridges (both ball and bird-shot cartridges can be used in one and the same gun but require different magazines). Rate of fire—Semi-automatic only (a single shot for each separate pull of the trigger) up to the rate of 100 single aimed shots a minute.

tions for sighting and the ballistic figures given for Model 1921 Submachine Gun apply equally to the Model 1927 Semi-Automatic Carbine.

Magazines: The Model 1927 Carbine uses the same box magazines and drum magazines as the Model 1921 Submachine Gun.

Parts: When ordering parts, use the same names of parts as in Model 1921 but be sure to specify that parts are wanted for the 1927 Carbine. The *rocker plunger,* the *rocker plunger spring* and the *rocker plunger pin* are found in Model 1927 Carbine only. Some Model 1927 Carbines have *vertical foregrip,* others have *horizontal foregrip.* State the Model number and type of foregrip, and always give the carbine serial number.

To take apart or re-assemble, and for cleaning and oiling, follow the same instructions as for Model 1921.

Cutts Compensator is usually ordered on Model 1927 Carbine as well as on the Submachine Guns, as it stabilizes the gun when fired rapidly, and reduces the recoil to practically nothing. Cutts Compensators can only be fitted to Thompson Carbines and Submachine Guns at the factory.

Part X

CARRYING EQUIPMENT AND ACCESSORIES

(A) Carrying equipment consists of Web Gun Carrier Case for Model 21A and 21AC Submachine Guns including Model 27A and 27AC when equipped with vertical foregrip. When ordering gun cases the model of gun and whether equipped with Cutts Compensator or not as well as whether for mounted or demounted use should be stated including type of foregrip on gun (i. e.) vertical or horizontal. Ordinarily with a horizontal foregrip guns are equipped with gun slings for carrying and gun cases are not essential. The Web Gun Carrier Case contains a pocket for carrying

TYPE B

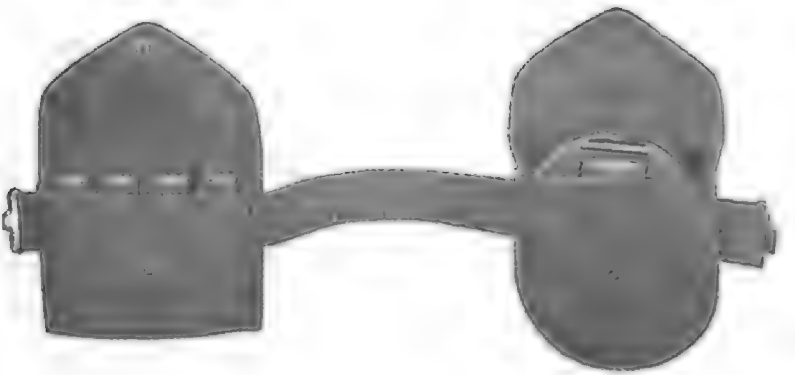
Web Gun Carrier Case for Mounted Use.

detachable stock and a four cell pocket for carrying four twenty capacity type XX box magazines. A fifth type XX magazine is carried attached to gun in case. There is also provided a Web Belt on which a four cell pocket web case for Type XX Magazines and a Web Case for Type L fifty capacity drum magazine can be attached. The Web Case for Type L drum magazine can be ordered with a shoulder strap for carrying if so desired instead of being carried on belt.

TYPE A

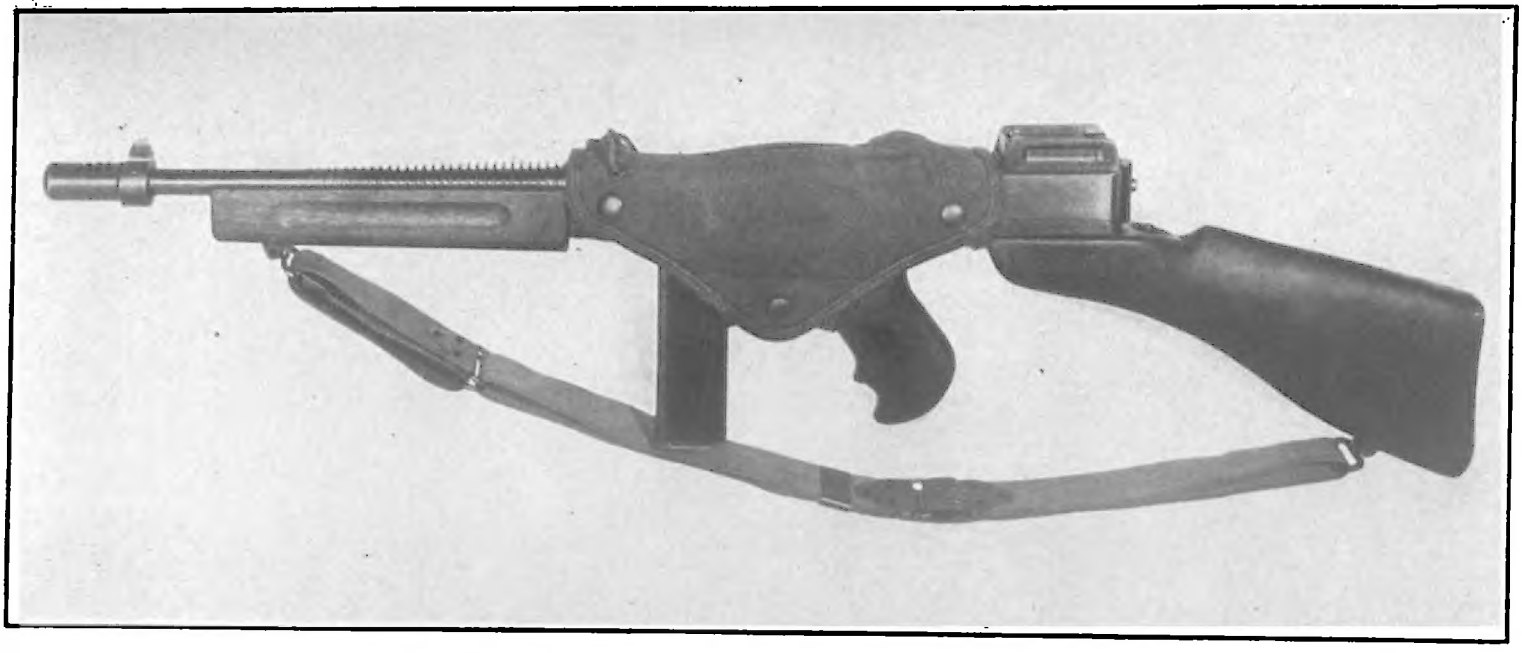
Gun Carrier Case showing holster for stock and four pockets for 20-capacity box magazines.

Fifty round drum magazine case with shoulder strap.



TYPE D

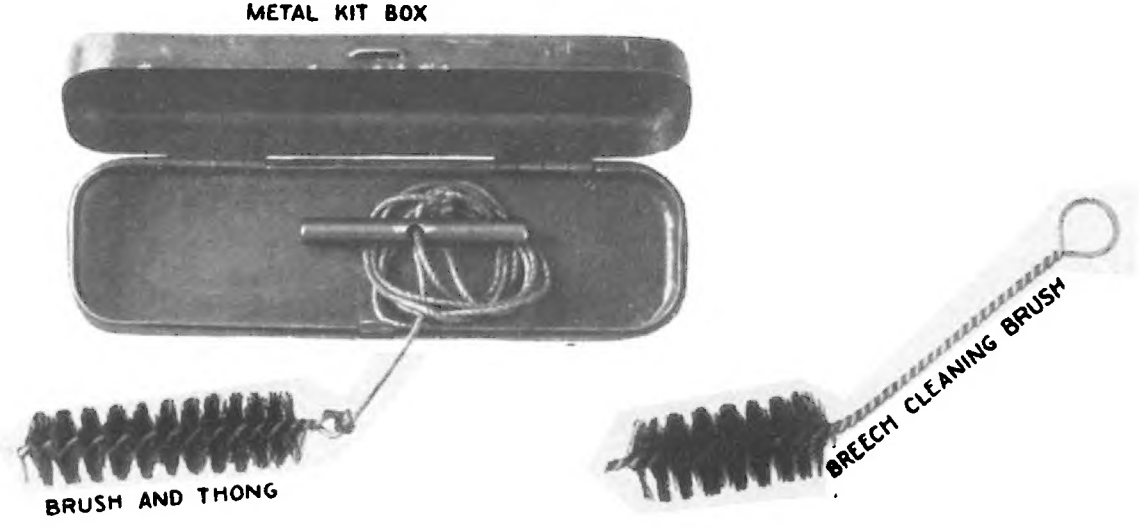
Four-pocket case for 20-round box magazines and case for 50-round drum magazine attached to web belt.



Thompson Gun breech cover for the protection of gun mechanism—can be instantly taken off by one continuous pull on cover flap. After being detached in an emergency, a leather thong holds cover on gun so it will not be lost.

Method of carrying Models No. 21A and 21AC

Method of carrying Model No. 27A, Model No. 27AC (when equipped with horizontal foregrip) and Models No. 28A and 28AC.



The Metal Kit Box is same size as Type XX box magazine and is designed to be carried in a single cell of the four cell Type XX magazine web carrier case. The parts to be carried in this box are recommended as those numbered 7, 8, 9, 10, 11, 12, 16, 17, 19, 23, 29, 30, 35, 37—on p. 7.